IN THE CLAIMS

This listing of claims replaces all prior versions and listing of claims in the application:

1. (currently amended) An optical microswitch for use with a laser beam that extends along a path comprising a body having an inlet port adapted to receive the laser beam and a plurality of outlet ports, a plurality of mirrors carried by the body, a plurality of micromotors carried by the body, ~~attachment~~microattachment means for rigidly coupling the plurality of mirrors to the respective plurality of micromotors whereby the micromotors selectively move the mirrors from a first position out of the path of the laser beam to a second position into the path of the laser beam to direct the laser beam to one of the outlet ports, each of the micromotors having at least one electrostatically-driven comb drive assembly therein for moving the respective mirror to one of the first and second positions, and a controller electrically coupled to the micromotors for providing control signals to the micromotors.

Claims 2-4 (cancelled).

5. (original) An optical microswitch as in Claim 1 wherein the plurality of mirrors and plurality of micromotors include a first plurality of mirrors and corresponding micromotors and a second plurality of mirrors and corresponding micromotors, the path of the laser beam extendable between the first plurality of micromotors and the second plurality of micromotors so that the first plurality of micromotors oppose the second plurality of micromotors relative to the path of the laser beam.

6. (original) An optical microswitch as in Claim 5 wherein the first plurality of mirrors and corresponding micromotors are linearly disposed along a first imaginary line and the second plurality of mirrors and corresponding micromotors are linearly disposed along a second imaginary line extending parallel to the first imaginary line and the path of the laser beam.

7. (original) An optical microswitch as in Claim 5 wherein the first plurality of micromotors includes at least two micromotors disposed side by side along a first imaginary line extending perpendicularly of the path of the laser beam and the second plurality of micromotors includes at least two micromotors disposed side by side along a second imaginary line extending perpendicularly of the path of the laser beam.

8. (original) An optical microswitch as in Claim 5 wherein the first and second plurality of mirrors are each inclined to direct the laser beam in a single direction.

9. (original) An optical microswitch as in Claim 5 wherein the plurality of mirrors and plurality of micromotors include a third plurality of mirrors and corresponding micromotors and a fourth plurality of mirrors and corresponding micromotors, the path of the laser beam extendable between the third plurality of micromotors and the fourth plurality of micromotors so that the third plurality of micromotors oppose the fourth plurality of micromotors relative to the path of the laser beam, means including an additional mirror and corresponding additional micromotor for selectively directing the laser beam along a first path extending between the first and second plurality of micromotors and a second path extending between the third and fourth plurality of micromotors.

10. (original) An optical microswitch as in Claim 9 wherein the first and second plurality of mirrors and the third and fourth plurality of mirrors are inclined to direct the laser beam in a single direction.

11. (original) An optical microswitch as in Claim 1 wherein the plurality of mirrors and plurality of micromotors include at least one first mirror and corresponding first micromotor and at least one second mirror and corresponding second micromotor, the path of the laser beam extendable between the at least one first micromotor and the at least one second micromotor so that the at least one first micromotor opposes the at least one second micromotor relative to the path of the laser beam and wherein the plurality of mirrors and plurality of micromotors further include at least one third mirror and corresponding third micromotor and at least one fourth mirror and corresponding fourth micromotor, the path of the laser beam extendable between the at least one third micromotor and the at least one fourth micromotor so that the at least one third micromotor opposes the at least one fourth micromotor relative to the path of the laser beam, means including an additional mirror and corresponding additional micromotor for selectively directing the laser beam along a first path extending between the at least one first micromotor and the at least one second micromotors and a second path extending between the at least one third micromotor and the at least one fourth micromotor.

12. (original) An optical microswitch as in Claim 1 wherein the plurality of micromotors includes a plurality of at least two micromotors disposed side by side along an imaginary line extending perpendicularly of the path of the laser beam.

13. (original) An optical microswitch as in Claim 1 wherein a plurality of at least twelve mirrors and corresponding micromotors are provided for selectively directing the laser beam in a plurality of parallel directions.

14. (original) An optical microswitch as in Claim 1 wherein each mirror comprises a layer of silicon and a layer of a reflective material adhered to the layer of silicon whereby the layer of silicon provides a surface of low roughness and high flatness.

15. (original) An optical microswitch as in Claim 14 wherein each mirror further comprises at least one pair of dielectric layers overlying the layer of a reflective material, said at least one pair of dielectric layers including a first layer of a low dielectric material and a second layer of a high dielectric material.

16. (original) An optical microswitch as in Claim 1 wherein at least one of the micromotors includes travel stop means for limiting the movement of the corresponding mirror at the second position whereby the travel stop means facilitates repeatability in the operation of the optical microswitch.

17. (original) An optical microswitch as in Claim 16 further comprising lead means for electrically connecting the travel stop means to the controller whereby the travel stop means permits the controller to monitor when the mirror is in the second position.

Claims 18-20 (cancelled).

21. (currently amended) An optical microapparatus for use with a laser beam that extends along a path comprising a body having an inlet port adapted to receive the laser beam and a plurality of outlet ports, a plurality of reflectors carried by the body, a plurality of micromotors carried by the body, each of the micromotors having at least one electrostatically-driven comb drive assembly, ~~attachment~~microattachment means for rigidly coupling the plurality of reflectors to the respective plurality of micromotors and a controller electrically coupled to the micromotors for providing control signals to the micromotors whereby each of the micromotors selectively moves the respective reflector from a first position out of the path of the laser beam to a second position into the path of the laser beam for directing light from the laser beam to an outlet port.

22. (previously presented) An optical microapparatus as in Claim 21 wherein the plurality of reflectors and plurality of micromotors include a first plurality of reflectors and corresponding micromotors and a second plurality of reflectors and corresponding micromotors,

the first plurality of micromotors opposing the second plurality of micromotors relative to the path of the laser beam so that the path of the laser beam extends between the first plurality of micromotors and the second plurality of micromotors.

23. (previously presented) An optical microapparatus as in Claim 21wherein each reflector comprises a layer of silicon and a layer of a reflective material adhered to the layer of silicon.

24. (currently amended) ~~A micromachined~~An optical microapparatus as in Claim 21 wherein each reflector ~~comprising~~comprises a planar substrate, a reflective layer disposed over the planar substrate and at least one optically transparent quarter-wavelength thin film disposed over the reflective layer.

25. (currently amended) ~~The micromachined reflector of~~An optical microapparatus as in Claim 24 wherein the reflective layer includes a gold layer.

26. (currently amended) ~~The micromachined reflector of~~An optical microapparatus as in Claim 24 wherein the reflective layer includes an aluminum layer.

27. (currently amended) ~~The micromachined reflector of~~An optical microapparatus as in Claim 24 further comprising an adhesion layer disposed between the reflective layer and the planar substrate for securing the reflective layer to the planar substrate.

28. (currently amended) ~~The micromachined reflector of~~An optical microapparatus as in Claim 27 wherein the adhesion layer is made of chromium.

29. (currently amended) ~~The micromachined reflector of~~An optical microapparatus as in Claim 24 wherein the at least one optically transparent quarter-wavelength thin film includes a quarter-wavelength silicon dioxide thin film.

30. (currently amended) ~~A micromachined~~An optical microapparatus as in Claim 21 wherein each reflector ~~comprising~~comprises a planar substrate, a reflective layer, means for securing the reflective layer to the planar substrate, a first dielectric layer of a material having a relatively low index of refraction overlying the reflective layer and a second dielectric layer of a material having a relatively high index of refraction overlying the first dielectric layer for increasing the reflectivity of the micromachined reflector.

31. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 30 for use with laser light having a wavelength wherein the first dielectric layer and the

second dielectric layer each have an optical thickness equal to one-quarter the wavelength of the laser beam.

32. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 30 wherein the first dielectric layer is a material selected from the group consisting of magnesium fluoride and silicon dioxide.

33. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 30 wherein the second dielectric layer is a material selected from the group consisting of cerium oxide and titanium.

34. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 30 wherein the reflective layer is a material selected from the group consisting of gold, silver and aluminum.

35. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 30 wherein the means for securing the reflective layer to the planar substrate is an adhesion layer.

36. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 35 wherein the adhesion layer is a material selected from the group consisting of chromium and titanium.

37. (currently amended) ~~A micromachined reflector~~An optical microapparatus as in Claim 30 further comprising an additional first dielectric layer of a material having a relatively low index of refraction overlying the second dielectric layer and an additional second dielectric layer of a material having a relatively high index of refraction overlying the additional first dielectric layer.